- 12 - DT01 Rec'd PCT/ 25 JAN 2005

Claims

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- 1. Method for mapping a hierarchical data format with descriptors (1, 10, 11) to a relational database management system, including the steps of:
- separating the descriptors (1, 10, 11) into portions of a plurality of common formats;
- storing the portions of the plurality of common formats in relations (20, 21, 22...) in the relational database; and
- o storing information describing the descriptor structure in the relations (20, 21, 22...) together with the portions of the plurality of common formats;

wherein the information describing the descriptor structure includes an indicator for the next upper hierarchical level of portions of a common format within the descriptors (1, 10, 11).

- 2. Method according to claim 1, wherein the information describing the descriptor structure includes descriptor numbers and relative and/or absolute positions of portions of a common format within the descriptors (1, 10, 11).
 - 3. Method according to claim 1 or 2, further comprising the step of providing independent relations (22, 23,...,32, 33,...) for the common formats.
 - 4. Method according to one of claims 1 to 3, further comprising the step of storing a descriptor index (40) in the relational database, the descriptor index (40) allowing to store additional information for every descriptor.
 - 5. Method according to claim 4, characterized in that the descriptor index (40) comprises at least descriptor numbers, absolute positions of the descriptors (1, 10, 11) within the relations (20, 21, 22...) and/or unique identifiers (4) for the descriptors (1, 10, 11).
 - 6. Method according to anyone of the preceding claims, characterized in that the hierarchical data format comprising

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descriptors (1, 10, 11) corresponds to the Extensible Markup Language.

- 7. Method according to anyone of the preceding claims, characterized in that the common formats comprise at least elements, attributes and text.
 - 8. Method according to claim 7, characterized in that the common format text is divided into string values and integer values.
 - 9. Method according to claim 7 or 8, characterized in that the common formats further comprise namespace information (2).
- 15 10. Database model for mapping a hierarchical data format comprising descriptors (1, 10, 11) to a relational database management system, characterized in that it uses a method according to any of the preceding claims.
- 20 11. Apparatus for reading from and/or writing to recording media, characterized in that it uses a method according to any of claims 1-9 or a database model according to claim 10 for mapping a hierarchical data format comprising descriptors (1, 10, 11) to a relational database management system.

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